Enallagma exsulans (Hagen): Fr1, M3, M7, M8, M11, M12, M13, \*M14, M15, M17, \*M24, \*Fa1, Fa11, PW1, \*DC8; May 28-August 6. Very common along Piedmont streams.

Enallagma geminatum Kellicott: M13, \*PG7, \*Fa1; May 21-June 24. A rare species today around Washington.

Enallagma signatum (Hagen): M6, M12, M13, \*M19, \*M24, C5, \*DC1; May 28-August 30. Flies late in the afternoon along very slow streams, such as the C & O Caual.

Enallagma traviatum Selys: M10, M12, M13, M15, \*M19, \*Fa1, DC6; June 2-July 9. A local pond species.

Ischnura posita (Hagen): M8, M10, M12, M13, M17, \*M19, PG1, PG4, C6, PW1, A2, \*DC1, \*DC7, \*DC10, \*DC12; April 22-September 15. Very common in the spring around the tiniest of ponds and marshy depressions.

Ischnura ramburii Selys: \*M19, PG4, \*PG6, \*PG7, \*DC1: May 18- August 31. An uncommon Coastal Plain species around Washington.

Ischnura verticalis (Say): M8, M10, M12, M13, M17, \*M19, PG1, \*PG6, \*C2, \*Fa4, Fa10, \*A4, \*DC7, \*DC8; April 30-September. Occurs abundantly around small ponds or in marshy areas, usually with *I. posita*.

Anomalagrion hastatum (Say): \*PG7, C6, \*DC1; April 22- September 1. Locally common in marshy places.

#### ACKNOWLEDGEMENTS

I would like to acknowledge the assistance of Ashley B. Gurney of the U. S. Department of Agriculture in making the Odonata collection of the United States National Museum available for examination, and for his helpful criticism of this report. Robert H. Gibbs has also criticized the report.

### REFERENCES

- Howe, R. H., 1921, The distribution of New England Odonata. Proc. Boston Soc. of Nat. Hist, 36: 105-133.
- McAtee, W. L., 1918, The natural history of the District of Columbia. Bull. 1, Biol. Soc. of Washington.
- Walker, E. M., 1925, The North American dragonflies of the genus Somatochlora. Univ. of Toronto Studies, Biol. Ser., no. 26.
- Williamson, E. B., 1909, The North American dragonflies of the genus Macromia. Proc. U.S.N.M. 37: 369-398.

# SPURIOUS RECORDS OF THE GENUS PYRGOMORPHA AUDINET-SEVILLE, 1839, IN THE AMERICAS

(Orthoptera; Acridoidea: Pyrgomorphidae)

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In former times, a number of species of Acridoidea, allegedly belonging to the Old World genus *Pyrgomorpha*, have been recorded from the Americas, but most of these have long since been assigned

to other genera outside the Pyrgomorphidae. There remain, however, two species of the genus, namely *P. tricarinata* I. Bolívar, 1884 and *P. dispar* I. Bolívar, 1884, whose occurrence in the western hemisphere ("Brazil" and "Mexico" respectively) has never been completely refuted.

Whilst examining material of the genus, kindly lent to me by Dr. Max Beier of the Naturhistorisches Museum in Vienna, I was fortunate enough to discover authentic material of both these species.

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## 1. Pyrgomorpha tricarinata Bol.

A single female specimen, undoubtedly from the type series, is in the Vienna Museum and is labelled "Brésil," on a small blue label, and "Coll. Camille Van Volxem" on a white one. There are also further labels: *P. trincarinata* Bol., Brasil, Coll. Br.v.W." and Brun-

ner's reference number, 12. 189. This specimen is presumably not a true type since it does not bear Bolívar's own determination label and no type is stated to be in Vienna. It does however, have the same measurements as those given by Bolívar in his original description,

with which it agrees very closely.

In the Brussels Museum there are three female specimens each bearing, in addition to blue and white labels similar to those mentioned above, a red-printed "type" label together with a hand-written label "Bolívar det.: Pyrgomorpha tricarinata Bol.". One also has two printed labels "M.R.Belg." and "N.7" (this specimen lacks the tip of the abdomen); the other two carry old labels "(Pyrgomorphidae)" and "Sphenarium sp." One of the latter (the most complete specimen) also bears Bolívar's own determination label "Pyrgomorpha carinata Boliv. Type". I have examined all three specimens through the courtesy of M. A. Collart of the Institut Royal des Sciences Naturelle de Belgique, Brussels, and designate the last mentioned specimen as lectotype.

P. tricarinata is an undoubted Pyrgomorpha, but comparison with North African material (including types—\$ lectotype and \$ syntype, Marruecos. Mazagán, VI.1907, Escaltera—Instituto español de Entomología, Madrid) indicates that it is synonymous with P. procera I. Bolívar, 1908, and that its data label had undoubtedly been misplaced.¹

<sup>&</sup>lt;sup>1</sup> M. A. Collart has kindly drawn my attention to some valuable information concerning the scientific expeditions of Camille Van Volxem published in 1875 (Ann. Soc. ent. Belg. 18: Comptes-Rendus des Séances, pp. (III-CVI), an extract of which is as follows:—"En avril 1871, il entreprit son premier voyage scientifique, . . . IC parcourut successivement la partie méridionale du Portugal, les côtes du Maroc [my italics] et le midi de l'Espagne et revint en Belgique le 29 juliet . . . En 1872, après une rapide excursion dans l'Eifel, il accompagna notre savant collègue, M. E. Van Beneden, chargé par la Gouvernement d'une mission scientifique au Brésil et à la Plata . . . qui dura du ler juliet 1872 à fin janvier 1873. . . . .' This undoubtedly explains how C. tricarinata, a Moroccan species, came to be described as Brazilian.

Being the earlier described species its name takes precedence, thus:-

Pyrgomorpha tricarinata I. Bolívar, 1884, An. Soc. esp. Hist. nat. 13: 422, 424, 495; 1905, Bol. Soc. esp. Hist. nat. 4: 452; 1909, Gen. Ins. 90: 32 - Kirby, 1910, Syn. Cat. Orth. 3: 326

= Pyrgomorpha procera I. Bolívar, 1908, Bol. Soc. esp. Hist. nat. 8: 328 - syn. nov.

The genus *Pyrgomorpha*, including N. African species, requires revision, so that the full extent of the synonymy is not yet known.

## 2. Pyrgomorpha dispar Bol.

A male and a female in the Vienna Museum are labelled "P. dispar Bol." and "Coll. Br. v. W." and bear also small blue labels "Mexico." These specimens also indicate that a mistake in original labelling has occurred. They are undoubted members of the genus Pyrgomorpha and agree closely with Bolívar's description of P. dispar, the measurements of the female (herein designated the lectotype) fitting exactly with those given. The male is smaller than the measurements given by Bolívar for that sex and it possesses one hind leg; it is therefore not available for selection as the type, but it obviously belongs to the same series.<sup>2</sup>

The specimens undoubtedly belong to the West African species currently known as *P. kraussi* Uvarov, 1926, Thus:—

Pyrgomorpha dispar I. Bolívar, 1884, An. Soc. esp. Hist. nat. 13: 423, 425, 495;
1904, Bol. Soc. esp. Hist. nat., 4: 451; 1909, Ins. 90: 32 - Scudder, 1901,
Occ. Pap. Boston Soc. nat. Hist. 6: 281 - Bruner, 1906, Biol. Centr. Amer.,
Orth. 2: 202 - Kirby, 1910, Syn. Cat. Orth. 3: 325 - Hebard, 1932, Trans.
Amer. ent. Soc. 58: 266

= Prygomorpha kraussi Urarov, 1926, Trans. ent. Soc. Lond. 1925: 440, pl. 48, fig. 20, 21 - syn. nov.

This completely disposes of *Pyrgomorpha* as an American genus as anticipated by Hebard (*l.c.*) and by Kevan (1959, *Publ. cult. Comp. Diam. Angola*, **43**: 207). Since neither *P. tricarinata* nor *P. dispar* have been figured previously as such, photographs of the material reported accompany these notes.

With regard to the name Pyrgomorpha dispar, a rather interesting nomenclatorial situation has arisen. Tanita dispar Miller, 1929, is also a Pyrgomorpha and, to avoid homonymy, its name was recently changed to P. milleri Uvarov, 1953, although the apparent homonym has been published subsequently (see synonymy below). However,

<sup>&</sup>lt;sup>2</sup>Since going to press, Dr. Beier has kindly forwarded me the second male of the series. This is obviously the one for which Bolívar gives measurements. It lacks hind legs and has its wings spread. It differs from the other specimens in that it bears no determination label and the word ''Mexico'' is below ''Coll. Br. v. W.'' and not on a separate blue label. Two other labels bearing Brunner's numbers ''1923'' and ''20.1923'', however, confirm that it is a syntype. I still prefer to regard the female as lectotype, however, since it is the more complete specimen.

at the specific level I cannot distinguish between Bolívar's and Miller's dispar (even although they were described quite independently), so that it is interesting to speculate as to what degree of homonymy exists. At the subspecific level I believe the two to be distinct, P. milleri being more southerly and occurring in less arid regions. It differs from typical P. dispar dispar Bol, in having a slightly less oblique frontal profile and a somewhat greater tendency towards macropterism.

Until a thorough revision of the genus is undertaken it is impossible to be certain of the exact status of these two forms, but for the present they may be regarded as separate subsepcies. *P. dispar* (Miller) and *P. milleri*, however, are synonyms of *Tanita semlikiana* Rehn, as an examination of types and extensive series from many parts of Africa shows. The name of this form should thus be with the following

synonymy:--

Tanita semlikiana Rehn, 1914, Wiss. Ergebn. dtsch. Zent. Afr. Exp. 1907-1908,
5(1): 102 - Carpenter, 1921, Trans. ent. Soc. Lond. 1921: 53 [as "Tanita",
Ibid.: 23, 33, 36, 53-55]—Sjöstedt, 1929, Ark. Zool. 20A (15): 20, 21

- = Tanita dispar Miller, 1929, Trans. ent. Soc. Lond. 77: 79, pl. 8, fig. 28, 29
  Burtt, 1951, Proc. R. ent. Soc. Lond. (A)26: 65, pl. I, fig. 16-21 Thomas, 1954, Ibid. 29: 23, 29, 30 syn. nov.
- = Pyrgomorpha milleri Uvarov, 1953, Publ. cult. Comp. Diam. Angola, 21: 212, footnote syn. nov.
- = Pyrgomorpha dispar (Miller [nec Bolívar], Chapman & Robertson, 1958, J. ent. Soc. Sthn. Afr. 21: 99 [as "Pyrgomorpha", Ibid.: 93, fig. 8, 96.] syn. nov.

### A NEW GELASTOCORID RECORD FOR CUBA

### HEMIPTERA

Recently, through the courtesy of Ing. Fernando de Zayas, I have had the opportunity to examine a single male specimen of Gelastocoris oculatus oculatus (F.) from the collection of the Estación Experimental Agronómica, Santiago de las Vegas, Habana, Cuba. The specimen was collected by J. P. Carabiá on January 11, 1937, at Puerta de Golpe, Pinar del Río. This is the first record of the typical subspecies from Cuba. A specimen of G. oculatus variegatus (Guérin-Méneville) has been previously recorded from Isla de Pinos.

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